

01/13/00
Jc682 U.S. PTO

A

Please type a plus sign (+) inside this box → ☐ +
Approved for use through 09/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL <small>(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))</small>	Attorney Docket No.	6557
	First Inventor or Application Identifier	
	Title	Procedure And Press For Producing Etc.
	Express Mail Label No.	

APPLICATION ELEMENTS <small>See MPEP chapter 600 concerning utility patent application contents.</small>	ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
1. <input checked="" type="checkbox"/> * Fee Transmittal Form (e.g., PTO/SB/17) <small>(Submit an original and a duplicate for fee processing)</small>	6. <input type="checkbox"/> Microfiche Computer Program (Appendix)
2. <input checked="" type="checkbox"/> Specification [Total Pages 10] <small>(preferred arrangement set forth below)</small> <ul style="list-style-type: none">- Descriptive title of the invention- Cross References to Related Applications- Statement Regarding Fed sponsored R & D- Reference to Microfiche Appendix- Background of the invention- Brief Summary of the invention- Brief Description of the Drawings (if filed)- Detailed Description- Claim(s)- Abstract of the Disclosure	7. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) <ul style="list-style-type: none">a. <input type="checkbox"/> Computer Readable Copyb. <input type="checkbox"/> Paper Copy (identical to computer copy)c. <input type="checkbox"/> Statement verifying identity of above copies
3. <input type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets 4]	ACCOMPANYING APPLICATION PARTS 8. <input type="checkbox"/> Assignment Papers (cover sheet & document(s)) 9. <input type="checkbox"/> 37 C.F.R. § 3.73(b) Statement (when there is an assignee) <input checked="" type="checkbox"/> Power of Attorney 10. <input type="checkbox"/> English Translation Document (if applicable) 11. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations 12. <input type="checkbox"/> Preliminary Amendment 13. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 14. <input checked="" type="checkbox"/> Small Entity Statement(s) <input type="checkbox"/> Statement filed in prior application, Status still proper and desired (PTO/SB/09-12) 15. <input checked="" type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. <input type="checkbox"/> Other:
4. Oath or Declaration [Total Pages 12] <ul style="list-style-type: none">a. <input checked="" type="checkbox"/> Newly executed (original or copy)b. <input type="checkbox"/> Copy from a prior application (37 C.F.R. § 1.63(d)) (for continuation/divisional with Box 17 completed) [Note Box 5 below]<ul style="list-style-type: none">i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).	
5. <input type="checkbox"/> Incorporation By Reference (useable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered to be part of the disclosure of the accompanying application and is hereby incorporated by reference therein.	
17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment: <input type="checkbox"/> Continuation <input type="checkbox"/> Divisional <input type="checkbox"/> Continuation-in-part (CIP) of prior application No: _____ Prior application information: Examiner _____ Group / Art Unit: _____	

Jc688 U.S. PTO
09/482046
01/13/00

18. CORRESPONDENCE ADDRESS					
<input type="checkbox"/> Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) or <input type="checkbox"/> Correspondence address below					
Name	Shlesinger, Fitzsimmons & Shlesinger				
Address	183 East Main Street, Suite 1323				
City	Rochester	State	New York	Zip Code	14604
Country	United States	Telephone	(716) 325-4618	Fax	(716) 232-5997

Name (Print/Type)	Philip K. Fitzsimmons	Registration No. (Attorney/Agent)	19955
Signature	<i>Philip K. Fitzsimmons</i>	Date	Jan 6 2000

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

January 6, 2000

Date

TO THE COMMISSIONER OF PATENTS AND TRADEMARKS:

Transmitted herewith for filing is the patent application of _____

Antonio Gigolafor Procedure And Press For Producing Screening And Humidifying Panels In
Particular For Avocultural Facilities Or Greenhouses And Panels Produced
By This Procedure

Enclosed are:

- ☒ 4 sheets of drawings, plus 2 copies each
☐ an assignment of the invention to _____
☒ a certified copy of an Italian _____ application
☐ associate power of attorney
☒ a verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27
☒ the filing fee has been calculated as shown below:

FOR	(Col. 1)	(Col. 2)	SMALL ENTITY		OTHER THAN SMALL ENTITY	
	No. Filed	No. Extra	RATE	FEE	RATE	FEE
BASIC FEE				\$345.00		\$690.00
TOTAL CLAIMS	11-20	0	x \$9	0.00	x \$18	
INDEPENDENT CLAIMS	3-3	0	x \$39	0.00	x \$78	
MULTIPLE DEPENDENT CLAIM PRESENT			x \$130		x \$260	
ASSIGNMENT FEE				\$ 40.00		
			TOTAL	\$ 345.00	TOTAL	\$

☐ Please charge my Deposit Account No. 19-2100 in the amount of \$ _____
 A duplicate copy of this sheet is enclosed.

☒ The Commissioner is hereby authorized to charge any additional fees which may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment to Deposit Account No. 19-2100. A duplicate copy of this sheet is enclosed.

☒ A check in the amount of \$ 345.00 to cover the filing fee is enclosed.

☒ Any additional filing fees required under 37 CFR 1.16.

I (We) claim priority under the International Convention of my (our)

Italian application No. MI 99 A 000073 filed January 15, 1999.

[Signature]
 Attorney of Record

Of: Shlesinger, Fitzsimmons & Shlesinger
 183 East Main Street, Suite 1323
 Rochester, New York 14604

Applicant or Patentee: _____
Serial or Patent No.: _____
Filed or Issued: _____
Title: _____

Attorney's
Docket No.: _____

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(c))—SMALL BUSINESS CONCERN

I hereby declare that I am

- ☒ the owner of the small business concern identified below;
☐ an official of the small business concern empowered to act on behalf of the concern identified below;

NAME OF SMALL BUSINESS CONCERN Gigola & Riccardi S.r.l.
ADDRESS OF SMALL BUSINESS CONCERN Via A. Volta, 7
25046 CAZZAGO S. MARTINO (Brescia, Italy)

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled Procedure and press for producing screening and humidifying... by inventor(s) Gigola, Antonio described in

- ☒ the specification filed herewith
☐ application serial no. _____, filed _____
☐ patent no. _____, issued _____

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e). *NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME _____
ADDRESS _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

NAME _____
ADDRESS _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING GIGOLA, ANTONIO
TITLE OF PERSON IF OTHER THAN OWNER _____
ADDRESS OF PERSON SIGNING VIA IV NOVEMBRE, 3 // 25046 - CAZZAGO SAN MARTINO BRESCIA/ ITALY

SIGNATURE  DATE November 18, 1999

Applicant or Patentee: _____ Attorney's
Serial or Patent No.: _____ Docket No.: _____
Filed or Issued: _____
For: _____

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR 1.9(f) and 1.27(b)) - INDEPENDENT INVENTOR

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled Procedure and press for producing screening and humidifying panels in particular for avicultural facilities or greenhouses and panels produced by this procedure described in _____

- ☒ the specification filed herewith
☐ application serial no. _____, filed _____
☐ patent no. _____, issued _____

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☐ no such person, concern, or organization
☒ persons, concerns or organizations listed below*

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

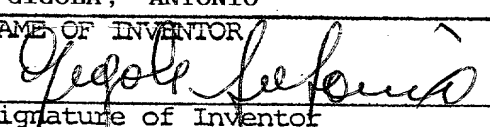
FULL NAME GIGOLA & RICCARDI S.r.l.
ADDRESS Via A. Volta, 7 - 25046 CAZZAGO S. MARTINO (Brescia, Italy)
☐ INDIVIDUAL ☒ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

FULL NAME _____
ADDRESS _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

FULL NAME _____
ADDRESS _____
☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

GIGOLA, ANTONIO
NAME OF INVENTOR _____ NAME OF INVENTOR _____ NAME OF INVENTOR _____
 Signature of Inventor _____ Signature of Inventor _____
November 18, 1999

Date _____ Date _____ Date _____

"Procedure and press for producing screening and humidifying panels in particular for avicultural facilities or greenhouses and panels produced by this procedure"

5

BACKGROUND OF THE INVENTION

09482046 "011300

The present invention relates to a method for producing screening and humidifying panels in particular for avicultural facilities or greenhouses and a panel produced by this procedure and equipment for this method.

In the field there are known honeycombed panels with channels extending between the two faces of the panel to allow air passage. There are predominantly two types of panels, to wit screening panels in which the channels are provided so as not to have the two ends aligned and thus prevent or reduce light inlet, and humidifying panels in which are made passages between the channels to permit continuous falling of a water veil to humidify the air passing through the channels.

Screening panels can be made of any material and in general plastic is preferred so as to press easily the channels with the necessary non-rectilinear configuration.

Humidifying panels require to be made from moderately absorbent and porous materials to obtain a moist surface as broad as possible in contact with the air. The preferred material is impregnated cardboard which has been found to give the best characteristics in the particular application. Panels are accordingly made from glued cardboard layers appropriately undulated to form air

channels and water passages. Unfortunately, by the known techniques it is impossible to make undulated cardboard with non-rectilinear undulations. For this reason the channels of the panels made in this manner are also

5 rectilinear and it is accordingly impossible to make humidifying panels having screening properties also. Another problem is that the undulations can be produced continuously only in a direction near the transversal direction of the cardboard strip. This prevents obtaining

10 panels having the inclinations which would be preferable for a more uniform distribution of the water veil. In addition the undulated cardboard layers forming the water passages should have the undulations with extension nearly right above the panel. Such a direction is however also

15 that of maximum transversal extension of the panel. Since the extension of the cardboard in the direction parallel to the undulations coincides with the transversal extension of the cardboard strip during production of the undulations it is difficult and costly to make larger panels.

20 The general purpose of the present invention is to remedy the above mentioned shortcomings by making available a production method which would make it possible to obtain cardboard panels with both screening and humidifying functions and in addition with the humidifying function

25 incremented with respect to that of the prior art panels. Again in accordance with the purposes of the present invention there is supplied a panel made in accordance with said method and tools for the method.

09482045 "011300

SUMMARY OF THE INVENTION

In view of this purpose it was sought to provide in accordance with the present invention a process for manufacturing screening and humidifying panels in particular for avicultural facilities or greenhouses comprising the steps of shaping the cardboard sheets with non-rectilinear undulated channels by means of sequential pressing of the individual channels and gluing together of the sheets arranged with alternating different mutual inclination of the channels.

Again in view of the above mentioned purposes it is sought to make a screening and humidifying panel in particular for avicultural facilities or greenhouses made up of cardboard sheets shaped by means of pressure with non-rectilinear undulated channels glued together arranged with different mutual alternating inclination of the channels.

Furthermore it is sought to make a press for obtaining deformed cardboard sheets with channels for manufacturing screening and humidifying panels in particular for avicultural facilities or greenhouses and comprising a bottom die made up of a plurality of segments with each one representing at least part of a channel and movable sequentially for pressing the cardboard starting from one end of the press.

BRIEF DESCRIPTION OF THE DRAWINGS

To clarify the explanation of the innovative principles of

the present invention and its advantages compared with the prior art there is described below with the aid of the annexed drawings a possible embodiment thereof by way of non-limiting example applying said principles. In the drawings:

FIG 1 shows a diagrammatic perspective view of a panel in accordance with the present invention,

FIG 2 shows a plan view of a layer of the panel,

FIG 3 shows a partially cross sectioned side view of the panel,

FIG 4 shows a diagrammatic side elevation of a press for obtaining layers in accordance with the present invention,

FIGS 5 and 6 shows views similar to FIG 2 but of variant embodiments, and

FIG 7 shows a diagrammatic view of a second embodiment of a press in accordance with the present invention.

DETAILED DESCRIPTION OF THE INVENTION

With reference to the FIGS a panel 10 is made up of a plurality of layers of sheets 11 of cardboard impregnated e.g. with resin and glued together. Each sheet has shaped on it channels or undulations 12.

As may be seen in FIG 2 each of the channels 12 has end sections 15 which are near the edges of the sheet which coincide with the two faces 13, 14 for inlet & outlet of air into or from the panel. The sections 15 are basically at a right angle to the sheet edges and are connected by a section of channel 16 inclined so that the mouths of the

channels are not in view of each other along the channel axis. The screening function is obtained in this manner. The angle α can be e.g. around 130° . The undulations can have a height of approximately 7mm and the distance d between the crests can be approximately 21mm. As may be seen in FIG 3 neighboring sheets (indicated in the FIG by reference numbers 11a and 11b) are arranged overturned with respect to each other so that the channels on the two sheets have opposing inclinations. The contact points between the channel crests of the two sheets are glued to form the panel.

In this manner there are obtained channels for conveying the air between the faces 13 and 14 of the panel and the passages 17 which connect the air conveyance channels together and extend between the upper and lower faces 18, 19 of the panel. From the upper face water can thus be inlet to form a veil over all the walls of the sheets. The air humidification function is obtained thus. Thanks to the peculiar form of the channels distribution uniformity and exchange efficiency are much higher than those of conventional panels.

To be able to deform the cardboard to obtain the channels it has been found necessary to press the undulations on each sheet in sequence starting from one end. This is necessary to allow the cardboard to deform without tearing. FIG 4 shows diagrammatically a heated press 20 which obtains that. It comprises a base equipped with a die 21 reproducing the form to be obtained on the cardboard and a segmented moving die 22 with each segment 24 defining a

005770" 94028460

channel. The segments are operated by actuators 23 (only one is shown) to be able to descend on the die 21 in sequence starting from one end to reach the other end of the press. Once all the segments have descended the press
5 can remain closed for the time necessary for permanent deformation of the cardboard.

FIG 7 shows a possible alternative embodiment of a press in accordance with the present invention. A press 120 comprises a base with a die 121 reproducing the form to be
10 obtained on the cardboard. The upper movable press table 126 supports a segmented movable die 122 in which each segment 114 is connected to the upper table 126 through an elastically yielding member 123, e.g. a spring. The segments 124 are arranged at a growing distance from the
15 table 121 starting from one end and moving towards the other end of the undulated table. In this manner, upon operation of the press the segments 124 close sequentially on the table 121 to deform the cardboard sheet 11. The elastic members are chosen to have sufficient elastic force
20 to produce the correct compression of the cardboard without obstructing press closing. With a single command it is thus possible to obtain sequential deformation of the sheet 11.

The initial profile of the cardboard sheet to be shaped
25 must allow for the deformation produced by the press. FIG 2 shows how the sheet should have a lozenge form 25 to become rectangular after forming.

Surprisingly it has been found that the sequential forming permits deformation in accordance with non-rectilinear

09482046 "011300

undulations without tearing the cardboard.

It is now clear that the predetermined purposes have been achieved by making available a production method and a panel allowing obtaining both the screening function and the humidifying function.

Naturally the above description of an embodiment applying the innovative principles of the present invention is given by way of non-limiting example of said principles within the scope of the exclusive right claimed here.

10 For example the extension of the panel in all directions and the number of component layers will vary depending on specific requirements. The sheet forming process can also be accomplished by steps with a continuous strip of cardboard extending directly in the direction of greatest
15 contraction caused by the forming as shown in broken lines in FIG 2. The sheets will be trimmed after forming. The configuration of the channels can be different than shown while preserving the screening characteristics. For example FIG 5 shows a panel layer indicated by reference
20 number 111 having channels with initial and final parts 115 inclined in matching manner and the central part 116 at a right angle to the air inlet-outlet edge. FIG 6 shows another embodiment of a layer 211 in which the channels have initial and final parts 215 inclined in opposite
25 direction and the central part 216 at a right angle to the air inlet and outlet edge. Both embodiments can be pressed by the method in accordance with the present invention.

09482046 " 01.1.300

What is claimed is:

1. Process for manufacturing screening and humidifying panels and in particular for avicultural facilities or greenhouses comprising the steps of shaping the cardboard sheets with non-rectilinear undulated channels by means of sequential pressing of the individual channels and gluing together of the sheets arranged with alternating different mutual inclination of the channels.

2. Process in accordance with claim 1 wherein each channel has end sections near the edges of the sheet which will constitute inlet outlet sides of the panel and which are virtually at a right angle to said edges and inclined sections for connection of said end sections.

3. Process in accordance with claim 1 wherein each channel has end sections near the edges of the sheet which will constitute inlet outlet sides of the panel and which are inclined with respect to said edges and sections virtually at a right angle to said edges for connection of said end sections.

4. Process in accordance with claim 1 wherein pressing takes place by means of a plurality of die sections each representing at least part of a channel and moved to press the cardboard sequentially.

5. Process in accordance with claim 1 wherein the sheets are cut in lozenge shape before pressing to compensate for the contraction produced by the pressing.

6. Process in accordance with claim 1 wherein the sheets are made from a continuous strip of cardboard extending in the direction of the contraction produced by the pressing

00483045 "011300

and are cut from the strip after pressing.

7. Screening and humidifying panel in particular for avicultural facilities or greenhouses and formed from cardboard sheets shaped by pressing with non-rectilinear

5 undulated channels and glued together arranged with different mutual alternating inclination of the channels.

8. Panel in accordance with claim 7 wherein each channel has end sections near the sheet edges which constitute inlet and outlet sides of the panel and which are virtually
10 at a right angle to said edges and inclined sections for connection of said end sections.

9. Panel in accordance with claim 7 wherein each channel has end sections near the sheet edges which will constitute inlet outlet sides of the panel and which are inclined with
15 respect to said edges and sections virtually at a right angle to said edges and which are for connection of said end sections.

10. Press for obtaining deformed cardboard sheets for manufacturing screening and humidifying panels in
20 particular for avicultural facilities or greenhouses and comprising a die made up of a plurality of segments each representing at least part of a channel and moving sequentially to press the cardboard starting from one end of the press.

25 11. Press in accordance with claim 10 wherein the segments of the plurality are supported elastically on a moving press table to press sequentially the cardboard upon operation of the moving press table.

09432046 011300

ABSTRACT

00187046-01300
A process for manufacturing screening and humidifying panels in particular for air circulation in avicultural facilities or greenhouses comprises the steps of shaping cardboard sheets with non-rectilinear undulated channels by means of sequential pressing of the individual channels and gluing together of the sheets arranged with alternating different mutual inclination of the channels. To realize the process a press comprising a die made up of a plurality of segments each representing at least part of a channel and moving sequentially to press the cardboard starting from one end of the press is proposed.

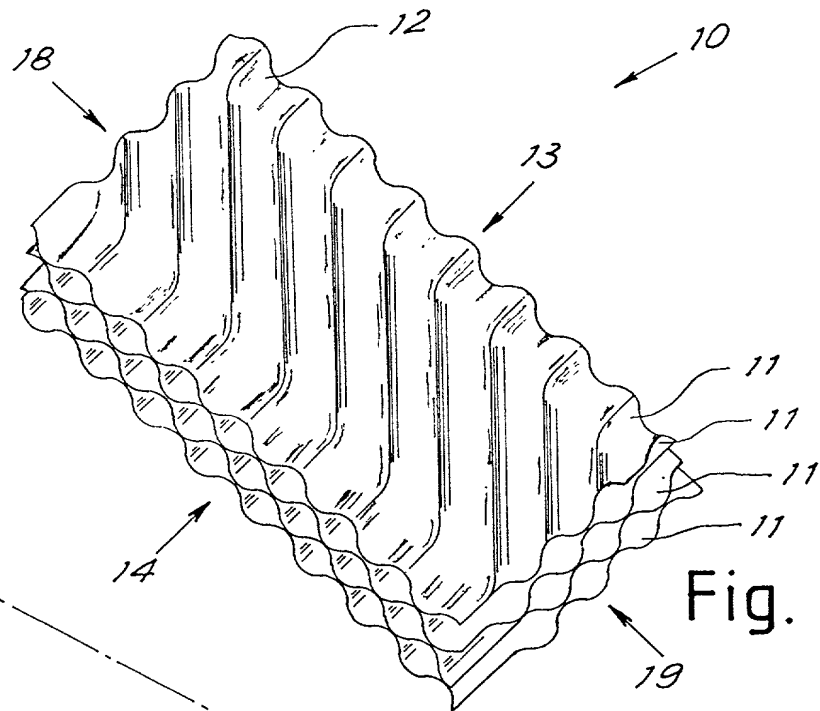


Fig. 1

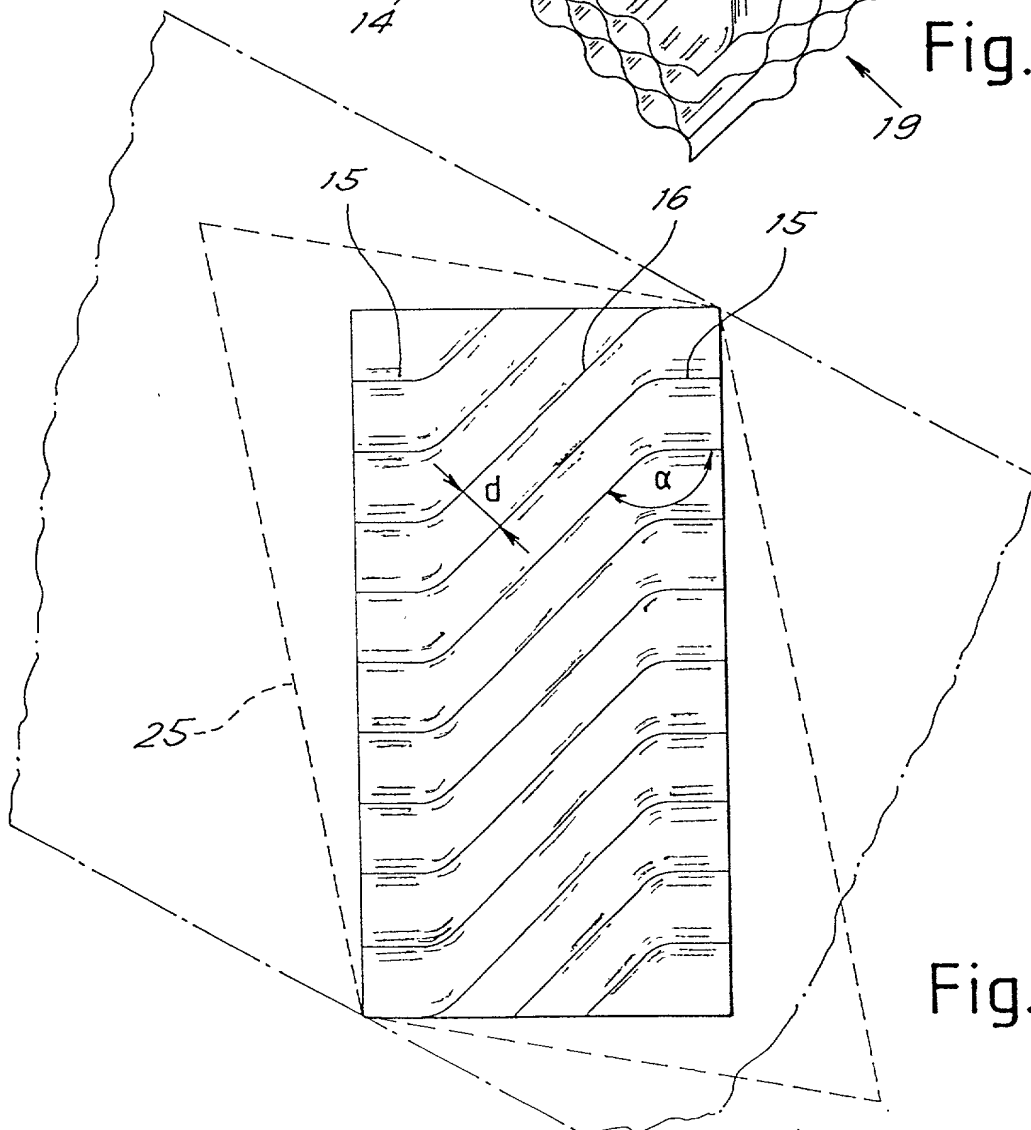


Fig. 2

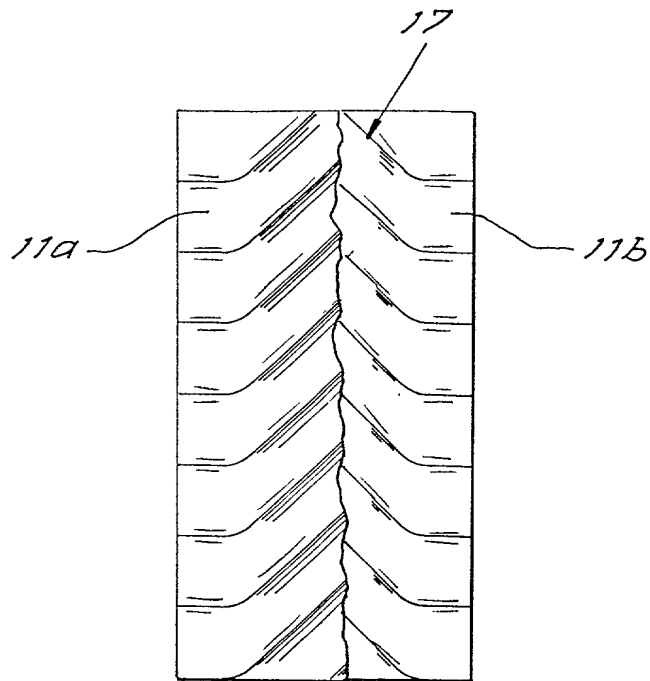


Fig. 3

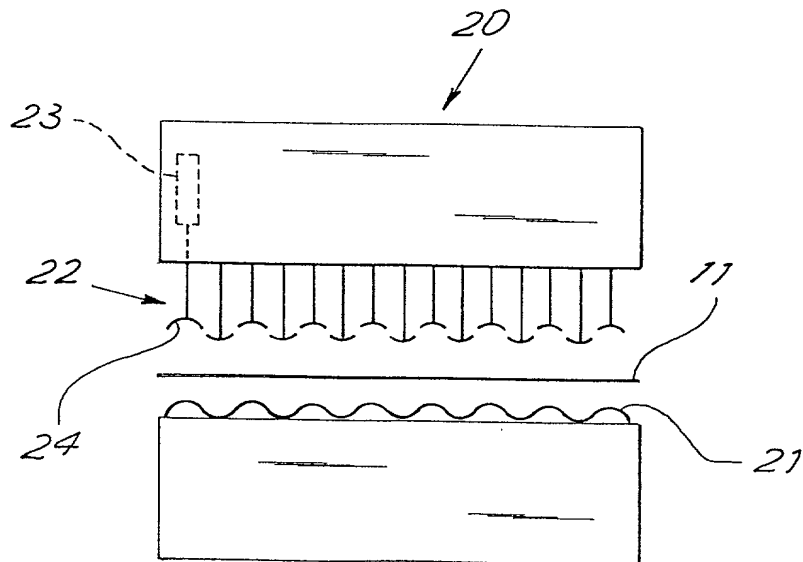


Fig. 4

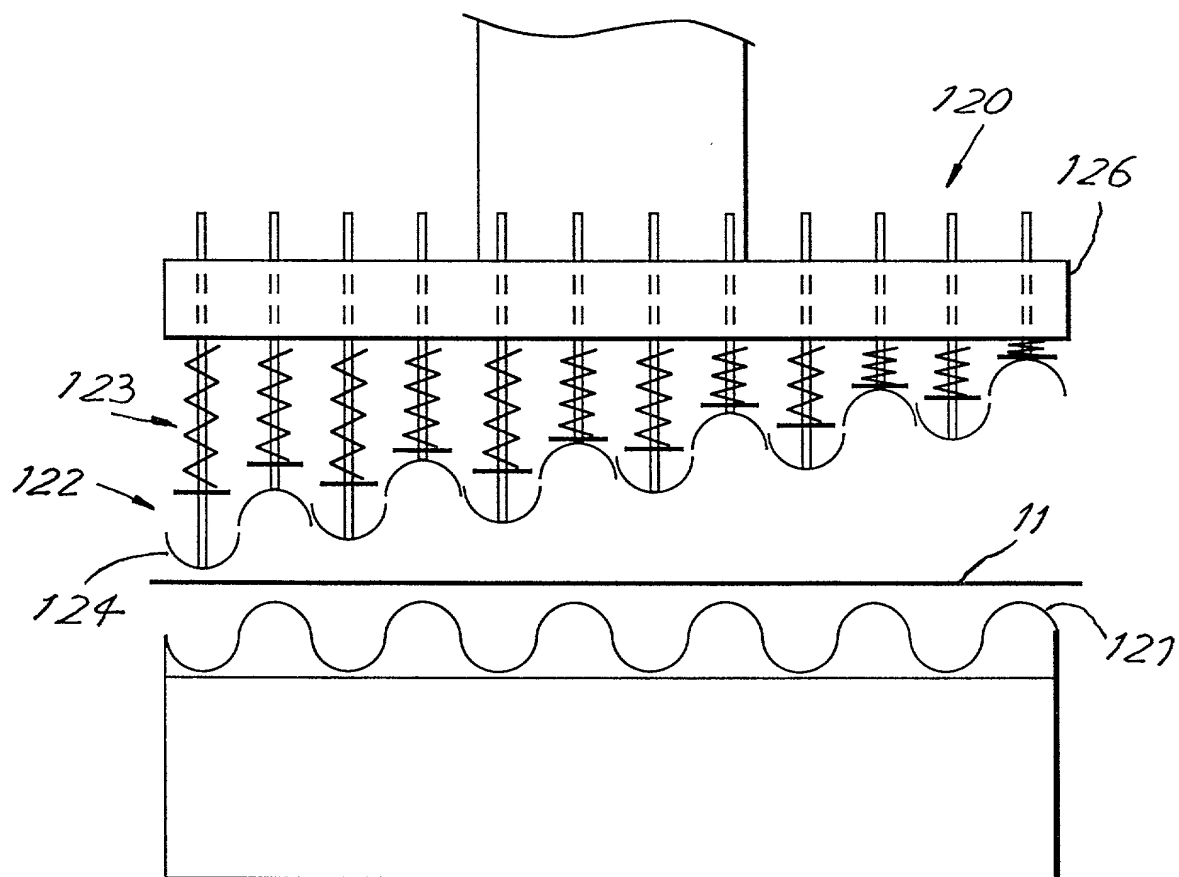


Fig.7

DECLARATION FOR PATENT APPLICATION

Docket No. _____

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled Procedure and press for producing screening and humidifying panels in, the specification of which particular for avicultural facilities or greenhouses and panels produced by this procedure

(check one) ☒ is attached hereto.☐ was filed on _____

Application Serial No. _____

and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56 (see over), which I have read.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
MI 99 A 000073	ITALY	15/01/1999	<input checked="" type="radio"/>	<input type="radio"/>
_____	_____	_____	<input type="radio"/>	<input type="radio"/>
_____	_____	_____	<input type="radio"/>	<input type="radio"/>

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56, which occurred between the filing date of the prior application and the national or PCT International filing date of this application:

(Application Serial No.)	(Filing Date)	(Status—patented, pending, abandoned)
_____	_____	_____
_____	_____	_____

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Philip K. Fitzsimmons (Reg. No. 19955)

Address all telephone calls to Philip K. Fitzsimmons at telephone no. (716) 325-4618

Address all correspondence to Shlesinger, Fitzsimmons & Shlesinger

183 East Main Street

1323 Alliance Building

Rochester, New York 14604

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor GIGOLA, ANTONIO

Inventor's signature Antonio Gigola Date November 18, 1999

Residence VIA IV NOVEMBRE, 3 Citizenship ITALY

Post Office Address 25046 - CAZZAGO SAN MARTINO / BRESCIA/ ITALY

Full name of second joint inventor, if any _____

Second Inventor's signature _____ Date _____

Residence _____ Citizenship _____

Post Office Address _____